

NIOSH eNews Web site

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"Acronym" of the Month
Air-Purifying Escape Respirators
(APER)

From the Director's Desk

As the National Occupational Research Agenda (NORA) approaches a 10-year milestone, NIOSH is requesting your assistance in planning for the future of occupational safety and health research for the nation. During the next several months, NIOSH and our partners will be conducting over a dozen public meetings throughout the country to address regional and sector-specific needs in occupational safety and health research. We request your input on identifying specific diseases, injuries, exposures, populations at risk and needs of the occupational safety and health systems.

The first three town hall meetings include a focus on the construction sector; the transportation, warehousing and utilities sector; and a more general regional session in lowa. The town hall meetings are structured so that any occupational safety and health topic can be considered. The details concerning the three initial meetings are as follows:

Transportation, Warehousing and Utilities Sector Monday, December 5, 2005 Holiday Inn College Park College Park, Maryland 9:00AM – 5:00 PM Eastern Time

Regional Session Monday, December 12, 2005 University of Iowa College of Public Health Iowa City, Iowa 9:00AM – 12:00 Noon Central Time

Construction Sector Monday, December 19, 2005 University of Chicago School of Public Health Chicago, Illinois 9:00AM – 5:00PM Central Time

The public meetings are open to all employers, workers, professional societies, organized labor, researchers, health professionals, government officials and other interested parties. Please join us to make a five minute presentation describing a significant occupational safety and health problem affecting your geographic area or sector-specific issues. Everyone is invited to speak, but to ensure adequate time for all, speakers must register at the NORA Town Hall Meeting Web site to be added to the agenda.

All presentations will be entered into the NORA Docket, and will be used by NORA Research Councils to help shape sector-specific and related cross-sector research agendas for the nation. If you cannot participate in or attend one of the public meetings, you can submit your comments online at http://www.cdc.gov/niosh/nora.

These meetings are the first of many public meetings which will occur in the months preceding the <u>NORA Symposium (April 18-20, 2006 in Washington, DC)</u>. Stay tuned to *eNews* for information on future town hall meetings. I encourage you to consider ways in which you might participate.

What's New in Nanotechnology

Key themes emerge from 2nd International Nanotechnology Symposium

The dialogue advances...

As 350 researchers, industry leaders, and government officials from 20 countries gathered for the 2nd International Symposium on Nanotechnology and Occupational Health, they were encouraged to expand their knowledge in complementary areas of expertise, forge new friendships and partnerships, and engage in a collective dialogue to advance the understanding of this rapidly growing technology.

NIOSH, in partnership with the University of Minnesota Office of the Vice President for Research, the Center for Biological and Environmental Nanotechnology at Rice University, and the Air Force Research Laboratory sponsored this international nanotechnology symposium in Minneapolis, Minnesota on October 3-6, 2005.

The symposium provided a range of opportunities for individuals from various disciplines to build on the global dialogue launched during the 1st International Symposium held last year in Buxton, England. Health and safety experts also had the opportunity to discuss the latest research being conducted around nanotechnology and establish new national and international partnerships.

The main meeting was preceded by a comprehensive array of tutorial courses presented by national and international experts on topics ranging from nanotechnology overviews to technical details of toxicological studies. Approximately 70 platform presentations and 40 posters were shared during the 4-day symposium. Presentations and posters focused on topics including toxicology, exposure assessment, measurement of nanomaterial properties, nanoparticle classification, regulatory policy, occupational safety and health, and public health risk.

Several consistent themes emerged throughout the symposium.

- Research needs to continue to move from in-vitro to in-vivo studies.
- Sound occupational exposure data are needed.
- Precise, influential, and agreed upon exposure metrics need to be determined for toxicology and worker exposure: size, number, mass, surface area, behavior, and transport.
- Agreement needs to be obtained on the parameters of effective particle classification.
- Standardized terminology needs to be established and defined.
- Central communication sources, such as the NIOSH Web-dialogue on Safe Nanotechnology and the Nanoparticle Information Library, need to be fostered as mechanisms for researchers, industry, government, and the public to retrieve and share updated information.

There was also strong agreement among the presenters, participants, and sponsors that interdisciplinary global collaboration continues to be vital in order to keep up with the advancements in nanotechnology and ensure proper safety and health for all workers.

In a unique addition to the content of the 1st symposium, day 4 of the 2nd symposium was dedicated solely to industry. Attendees heard from industry leaders about what industry is doing to advance nanotechnology, how nanotechnology is being used, and what industry needs to stay abreast of potential occupational safety and health concerns. Day 4 also included an open forum. As part of the forum, individuals were asked, "What issues keep you up at night?" Issues discussed included:

- Where can information be found regarding environmental rules and regulation?
- Sound quantitative data from both industry and the research community are needed to demonstrate the effectiveness of control procedures.
- The field of nanotechnology would benefit from an information exchange between pharmaceutical professionals and toxicologists to learn how the pharmaceutical industry learned to manage new potent chemical entities in the absence of complete toxicological data.
- The areas of combustibility and explosion hazard continue to have gaps in knowledge.
- There is a real need to consider which workers are being exposed; equipment maintenance and clean-up possibly posing the greatest potential for exposure.
- Collaborating with educational institutions in the early stages of nanotechnology development is a key opportunity.
- Not all nanoparticles are equal. Therefore, characterization and classification by toxicity and chemical and physical properties are needed.
- Exploring the possibility of classifying nanoparticles by behavior rather than toxicity because particle behavior may be a more accurate classification.

Recommendations to NIOSH

The following recommendations were specifically directed to NIOSH:

- Study the effectiveness of N95 respirators at an increased flow rate for particles below 150 nanometers.
- Identify issues and concerns that small businesses will face related to nanotechnology, and develop and recommend effective solutions.
- Lead the creation and establishment of a central communication source to share information on developing research, recent findings, lessons-learned, and general information exchange.

Future Plans for Continued Progress

The 2nd symposium in Minneapolis was successful in building on initiatives begun at the 1st symposium in Buxton, England. Please join us in Taiwan for the 3rd International Symposium on Nanotechnology, Occupational and Environmental Health which will be held in the fall of 2007. Until then, please continue to visit the NIOSH topic page at http://www.cdc.gov/niosh/topics/nanotech for updated information or to share any relevant information or experiences you have specific to nanotechnology.

RAND holds nanotechnology policy and planning workshop.

On October 17, 2005 the RAND Corporation, pursuant to a contract with NIOSH, held a policy and planning meeting to focus on nanotechnology and occupational safety and health. Leading experts in both fields along with leadership from key government agencies met to discuss near-term and long-term needs as nanotechnology and nanomaterials become more prevalent in the workplace.



Speaking to participants at the meeting, NIOSH Director John Howard, M.D., said "NIOSH believes that for its work to achieve real value, we must engage with you as our partners--partners in field and laboratory studies; partners in surveillance and data collection; partners in risk assessment; and partners in critical review of the accumulating evidence about both the implications as well as the applications of the emerging field of nanoengineering."

The panel addressed near-term needs including identifying where the greatest need is for NIOSH involvement, how to establish and communicate "best practices" to employers and workers, and types of nanomaterials where government resources should be focused. The discussion of long-term needs centered on determining the best approach for controlling exposures to nanomaterials, recognizing the importance of harmonization between government agencies and with key U.S. trading partners, and identifying ways NIOSH can more effectively interact with stakeholders as NIOSH develops and implements workplace nanotechnology research programs. The RAND Corporation will prepare a report summarizing the workshop proceedings.

Researchers discuss nanotechnology health questions in JAMA.

Questions about potential occupational health implications of nanotechnology are addressed in a news article in the October, 19, 2005 issue of the *Journal of the American Medical Association* (2005;294:1881-1883). In the article, Mark Hoover, senior research physical scientist at NIOSH, is among the scientists interviewed. He and other researchers note that the challenge is identifying the unique physical and chemical properties of the many different nanomaterials and turning that information into something meaningful for health risk assessment. NIOSH is addressing this issue by studying the toxicity and health risks associated with nanoparticle exposure in the workplace. This research is part of a concerted effort under the National Nanotechnology Initiative, a federal research and development program coordinating nanoscale science, engineering and technology research.

Personal Protective Equipment Electronic Listserv Available

eNews readers interested in receiving information about personal protective equipment (PPE) can sign-up for a new electronic mailing list available through the NIOSH National Personal Protective Technology Laboratory. You can sign-up by going to the Web site, http://www.cdc.gov/niosh/npptl/sub-NPPTL.html.

NIOSH presents University Safety Award

NIOSH's collaboration with the American Chemical Society (ACS), Division of Chemical Health and Safety resulted in funding the second annual national College and University Health and Safety Award among university chemical laboratories. This year's \$1,000 award was equally shared between two universities – the Massachusetts Institute of Technology (MIT) and the University of Nevada-Reno. The two recipients of the safety award were Louis DiBerardinis representing the MIT Environmental Health and Safety Office and Steven Oberg representing the UN-Reno Environmental Health and Safety Department. Mr. DiBerardinis presented a paper entitled "Building and Implementing an Environmental Health and Safety Management System in an Academic Environment," and Dr. Oberg's paper was entitled "Integration is a Key to University Lab Safety Program Success."

The NIOSH National Personal Protective Technology Laboratory Announces Reorganization

As of October 6, 2005, NIOSH's National Personal Protective Technology Laboratory (NPPTL) has reorganized into three branches. The branches are Technology Evaluation, Technology Research, and Policy and Standards Development. The Technology Evaluation group is responsible for the respirator certification program as well as the quality audit program. This quality program addresses periodic audits of respirator performance or reported problems with deployed units. The Technology Research branch will carry on research related to innovative technologies for respiratory protection, sensors for personal protective technologies, human performance, and PPE ensembles for first responders that provide improved protection against chemical and biological agents. The Policy and Standards branch will continue to develop and update standards to improve safety and health of respirator users, and produce user guidance documents.

The reorganization also created four new positions for NPPTL called program managers. The four managers will provide global direction for the respiratory protection, sensors, personal protective equipment ensembles, and human performance program.

Hurricane Response Update

As the clean-up continues and rebuilding begins in areas affected by Hurricanes Katrina, Rita and Wilma, NIOSH has assembled additional materials for workers and volunteers. Among these are the following:



- Guidance for clean-up workers involved with handling and burning hurricane debris, http://www.cdc.gov/niosh/topics/flood/burningdebris.html.
- Guidance for postexposure medical screening of workers leaving hurricane disaster recovery areas, http://www.cdc.gov/niosh/topics/flood/MedScreenWork.html.
- Updated information on the prevention of injuries and deaths related to entry into confined spaces, http://www.cdc.gov/niosh/topics/flood/confined.html.
- Working with displaced domestic animals, http://www.cdc.gov/niosh/topics/flood/animals.html.
- Services available through the NIOSH Health Hazard Evaluation program for employers and employees involved in Hurricane Katrina recovery, http://www.cdc.gov/niosh/topics/flood/services. html.

Additional resources on hurricane clean-up can be accessed on the Hurricane Katrina Response page, http://www.cdc.gov/niosh/topics/flood.

NIOSH Issues First Two Air-Purifying Escape Respirator Approvals for CBRN

NIOSH issued the first two certificates of approval for <u>air-purifying escape respirators</u> (<u>APER</u>) with chemical, biological, radiological, and nuclear (CBRN) protection. Approval was granted on October 24, 2005, to Mine Safety Appliances Company for the Safe Escape CBRN APER and on October 28, 2005, to ILC Dover for the SCape CBRN APER.



The approvals signify that the products are expected to protect the general working population in escape scenarios from chemical, biological, radiological, and nuclear exposures that could be seen at a terrorist event. NIOSH based its determinations on positive results from rigorous laboratory tests, evaluation of product specifications for the devices, and assessment of the manufacturer's quality control procedures. The action allows the manufacturers to label the approved devices as NIOSH-certified for occupational use. It does not constitute a commercial endorsement of the product. The approvals are posted on the NIOSH Web page at http://www.cdc.gov/niosh/npptl.

Public Meeting Highlights Outreach on Occupational Energy Research Program

Wanted: Comments, questions, and recommendations by stakeholders on NIOSH's Occupational Energy Research Program. In an October 27 public meeting in Washington, NIOSH convened interested partners to discuss the program's background, accomplishments to date, ongoing research, and potential future directions. The floor remains open for further input.

So far under the program, NIOSH has completed 54 research projects, published 151 peer-reviewed products, and compiled a rich database of health and exposure information for more than 300,000 workers at 15 U.S. Department of Energy (DOE) nuclear weapons sites in 13 states. The program began in 1990 under a memorandum of understanding with DOE, to address the question of whether potential work-related exposures at DOE sites were associated with risks for cancer or other illnesses.

"Thanks to the efforts of the past 15 years, scientists no longer are working from a virtually blank slate to address questions of potential health effects from low levels of work-related radiation," said NIOSH Director John Howard, M.D. "Many directions for strategic research present themselves, and priorities must be set so that the research dollar is spent as wisely as possible. Transparency and outreach are critical parts of that process."

Presentations and proceedings from the October 27 meeting will be made available on the NIOSH Web site when finalized. NIOSH is seeking ideas for future research related to the program. Suggestions for research can be sent to Patty Gudlewski at PGudlewski@cdc.gov. Questions related to the research program can be sent to Doug Daniels at RDaniels@cdc.gov or Steve Ahrenholz at SAhrenholz@cdc.gov. NIOSH will hold periodic future public meetings like the one on October 27, dates to be determined.

On a separate but related matter, a public review is being conducted by the National Academies (NA) at the request of DOE. The review will assess the NIOSH Occupational Energy Research Program, as well as public health activities conducted under the agreement with DOE by NIOSH's fellow agencies in the U.S. Centers for Disease Control and Prevention (CDC): the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry. From the review, the NA will recommend ways to enhance the scientific merit, focus, and effectiveness of the initiatives, as well as their impact on DOE's policies and decisions. A public meeting of the NA has been scheduled for November 3-4, 2005. More information can be found at the NA Web site, http://www4.nas.edu/cp.nsf/Projects+_by+_PIN/NRSB-O-05-01-A?OpenDocument.

NIOSH Chartbook receives CDC Communication Awards

On October 27, the NIOSH Worker Health Chartbook 2004 received two awards at the annual Centers for Disease Control and Prevention Communicators Roundtable Awards ceremony. The Chartbook received first place in the category "print communications more than 16 pages." NIOSH staff receiving the award were John Sestito, Alan Lunsford, Anne Hamilton and Roger Rosa. The Chartbook also received first place in the category "computer-based communications." Awards went to NIOSH staff John Sestito, Chris Gjessing, Glenn Doyle and Vern Anderson and to Constella staff Jane Chen, Joe Cauley and Chris Storms.

The Chartbook [DHHS (NIOSH) Publication Number 2004-146] is a descriptive epidemiologic reference of occupational morbidity and mortality in the United States. The document consolidates and presents an integrated view of occupational safety and health surveillance data and information from 19 surveillance programs and surveys of occupational injury and illness in the United States. The Chartbook includes over 400 figures and tables describing the magnitude, distribution and trends of the Nation's occupational injuries, illnesses, and fatalities. It is a valuable resource for agencies, organizations, employers, researchers, workers and others who need to know about occupational illnesses and injuries. The Chartbook can be accessed at http://www.cdc.gov/niosh/docs/chartbook.

View the Redesigned and Improved Mining Safety and Health Web Page

NIOSH has redesigned its Mining Safety and Health Web page. The updated page incorporates a significant amount of new safety and health information plus an improved layout to better serve customer needs. It also provides background information about the NIOSH Mining Research Program including research awards, core competencies, unique laboratories, community and educational outreach, and a brief discussion on how the research program is structured.

The redesigned page features improved search capabilities. The "Search Mining" feature on each page lets one search only the NIOSH Mining Safety and Health page. The user can still search all of NIOSH using the "Search NIOSH" option. The expanded "Safety and Health Topics" have been reorganized for ease in finding information. Each topic page now has a significant amount of new and updated information, as well as links to related topics of interest. All topics can be accessed from the home page.

More than 650 mine safety and health publications are now downloadable from the page. Short summaries let the user quickly identify publications of interest. The updated page offers over 120 NIOSH mine safety and health products, including training exercises, toolbox talks, videos, computer software, guides and checklists, many of which are downloadable.

The new page can be found at http://www.cdc.gov/niosh/mining. If you have comments or would like additional information, please contact Mike Brnich at MBrnich@cdc.gov.

NIOSH Morgantown Wellness Center receives Silver Award

The NIOSH Morgantown Wellness Center has received the Silver Well Workplace Award from the Wellness Council of West Virginia. This organization is part of the Wellness Council of America (WELCOA) which "focuses on building Well Workplaces—organizations that are dedicated to the health of their employees." The Well Workplace process provides organizations with a structure or blue print to help them build results-oriented wellness programs. This prestigious initiative recognizes quality and excellence in worksite health promotion. Driven by a rigorous set of criteria, organizations of all kinds compete to be recognized as one of America's Healthiest Companies. Two years ago the NIOSH Morgantown Wellness Center received the Bronze award. More and more employees are becoming aware of wellness and are starting to make lifestyle changes that will benefit their health for years to come.

Upcoming Exhibits

Exploring the Modern Mineral Renaissance-Northwest Mining Association 111th Annual Meeting and Exposition will be held December 5-9, 2005 in Spokane Washington. For more information contact Pay Heywood at pheywood@nwma.org.

10th Annual Safety Seminar for Underground Stone Mines will be held December 6-7, 2005 in Louisville, Kentucky. More information can be found at http://www.cdc.gov/niosh/mining/calendar/2005StoneFlyer.pdf or by contacting Lou Prosser at LProsser@cdc.gov. For registration information contact Kim Mitchell at KAMitchell@cdc.gov.

r2p Corner

NIOSH and the National Fire Protection Association (NFPA) signed a memorandum of understanding on October 31 to facilitate partnering, cooperation, and coordination of activities involving personal protective equipment (PPE). The primary focus of the agreement will include emergency responder protective clothing and equipment, including PPE for response to all emergency incidents involving fire, technical rescue, hazardous materials, emergency medical, special operations, and terrorism incidents involving chemical, biological, radiological, nuclear, and explosive hazards. Primary focus also will include the development of standards for emergency responder organizations and personnel concerning the safety, deployment, operations, and protection of emergency responders. The agreement was signed by NIOSH Director John Howard, M.D., and NFPA President and Chief Executive Officer James M. Shannon.

NORA

In last month's *eNews* we reported on comments submitted in preparation for the next decade of the National Occupational Research Agenda (NORA). This month we take a closer look at the over 40 comments which focused on cross sector issues. Cross sector issues affect multiple sectors and encompass numerous safety and health topics. The following chart describes the most frequently mentioned topics submitted to the NORA Web site.

Cross-Sector Category	No. of Comments
Special Populations	7
Chemical & Particle Exposures	6
Musculoskeletal Disorders	5
Work Organization, Violence, Stress	3
Capacity Building (training OSH professionals)	2
Noise and Hearing Loss	2
Personal Protective Equipment	2
Reproductive Health	2

The full set of comments can be viewed on the NORA Web site at http://www.cdc.gov/niosh/nora.

Concerned your topic is not on this list? Submit your thoughts at the NORA Web site.

News from our Partners

The Connecticut Department of Public Health's Occupational Health Program has released the Fall 2005 edition of Connecticut Occupational Health eNews (COHeN). COHeN is a quarterly electronic newsletter for professionals interested in the protection and promotion of worker health in all work environments. You can access COHeN at http://www.dph.state.ct.us/BRS/EOHA/enews.htm.

Communication Products

Reports from four NIOSH Health Hazard Evaluations available.

Naturally occurring radioactive deposits in a national park

The National Park Service requested NIOSH assistance in assessing potential exposures to park employees from naturally occurring radioactive mineral deposits in piping removed from renovated bathhouses. Radon levels were elevated in two buildings and in one water sample (but not the public drinking fountain). NIOSH recommended further radon evaluations of park buildings, radon remediation, and a water monitoring program. The full report is available at http://www.cdc.gov/niosh/hhe/reports/pdfs/2004-0094-2978.pdf.

Musculoskeletal factors at an automotive parts manufacturer

Employees requested NIOSH assistance in assessing musculoskeletal factors on a new axle assembly line. NIOSH investigators observed and videotaped jobs, reviewed illness and injury records, and interviewed employees and health and safety managers. NIOSH investigators concluded that due to the start-up nature of the operations, current available information did not indicate a hazard. They stressed to the managers, however, that timely implementation of changes in the parts delivery system and evaluation of the physical stressors of newly designed jobs was needed to ensure that musculoskeletal injuries did not occur as production levels rose. The full report is available at http://www.cdc.gov/niosh/hhe/reports/pdfs/2004-0116-2977.pdf.

Lead and wood dust exposures during wood floor refinishing

Managers of a floor service company requested NIOSH assistance in lead and wood dust exposures during wood floor refinishing. NIOSH investigators found that while lead exposures did not exceed occupational exposure limits, workers were exposed to wood dust in excess of the NIOSH Recommended Exposure Limit during sanding and buffing tasks. Additionally, the settled dust on floors during refinishing contained lead. They recommended engineering controls, appropriate use of respiratory protection, and improved cleanup methods. The full report is available at http://www.cdc.gov/niosh/hhe/reports/pdfs/2000-0308-2981.pdf.

Indoor environmental quality at a fire station

Employees requested NIOSH assistance in assessing respiratory and other health problems they believed were related to exposures in the indoor environment, including mold. NIOSH investigators observed conditions that were deemed to have potential for affecting indoor air quality. They learned that the self-reported prevalence of physician diagnosed asthma was about three times higher than in the general population. Recommendations were made to identify and repair water leaks, further evaluate the ventilation system, and properly remediate water-damaged materials areas. The full report is available at http://www.cdc.gov/niosh/hhe/reports/pdfs/2004-0246-2979.pdf.

Report of public meeting to seek input on gaps in chronic lymphocytic leukemia (CLL) radiogenicity research held on July 21, 2004

Information from a NIOSH public meeting focusing on chronic lymphocytic leukemia (CLL) radiogenicity is now available, http://www.cdc.gov/niosh/docs/2006-100. As directed by the Congress, NIOSH has added CLL radiogenicity to existing research being conducted under the NIOSH Occupational Energy Research Program. The purpose of the July 2004 meeting was to discuss available research strategies for investigating the potential relationship between the incidence of CLL and worker exposures to ionizing radiation and to identify gaps in current research so that NIOSH can further develop our research program in this area.

Strengths of Storytelling for Safety Training Explored in New Report

A new report from the NIOSH describes the importance of personal storytelling as an effective tool for mine safety and health training. It also discusses the components of producing successful safety training videos that build on the storytelling tradition, drawing from NIOSH's own experiences in this regard.

Tell Me a Story: Why Stories are Essential to Effective Safety Training, DHHS (NIOSH) Publication No. 2005-152, is based on a seven-year research project. The intent was to develop and assess new materials for training miners in ways to work safely in a challenging and inherently dangerous setting. The effort was designed to replicate traditional industry practices in which beginning miners are mentored by older, more experienced miners, and to reflect cultural values in mining. The new report is available at http://www.cdc.gov/niosh/mining/pubs/pubreference/2005-152.htm. For further information on the story-based safety training model, contact Elaine Cullen, NIOSH Spokane Research Laboratory, ecullen@cdc.gov. Printed copies of the report are available from Candace Pickett, NIOSH Spokane Research Laboratory, at cpickett@cdc.gov. A listing of NIOSH miner training videos is available at http://www.cdc.gov/niosh/mining/products/#videos.

New Mining Publications

NIOSH releases several new mining publications.

- Programmable electronic mining systems: best practice recommendations (in nine parts)
 (DHHS NIOSH Publication No. 2005-150) is the sixth in a nine-part series of recommendations addressing the functional safety of processor-controlled mining equipment. http://www.cdc.gov/niosh/mining/pubs/pubreference/2005-150.htm.
- Coaching skills for on-the-job trainers (DHHS NIOSH Publication No. 2005-146) describes how to develop and manage an on-the-job training program so that information is effectively and efficiently passed from the trainer to the trainee. http://www.cdc.gov/niosh/mining/pubs/pubreference/2005-146.
 httm.
- Significant dust dispersion models for mining operators (DHHS NIOSH Publication No. 2005-138) highlights the various dust dispersion models that have been developed specifically for the mining industry. http://www.cdc.gov/niosh/mining/pubs/pubreference/2005-138.htm.

Upcoming Events

Deadline Approaches: Call for Abstracts for the 2006 NORA Symposium

NIOSH is requesting abstracts for *National Occupational Research Agenda (NORA) Symposium 2006:* Research Makes a Difference. Deadline for receipt of abstracts is December 9, 2005. The call for abstracts can be downloaded at the NORA Web site, http://www.cdc.gov/niosh/NORA. If you have questions concerning the call for abstracts, contact Roger Rosa at RRosa@cdc.gov.

The symposium will be held on April 18-20, 2006 in Washington, D.C. Several hundred occupational safety and health researchers, stakeholders, and policymakers from the public and private sectors will convene to celebrate completion of the first decade of NORA, mark the 35th anniversary of NIOSH, and inaugurate the new plan for the future of NORA. An important aspect of this conference will be scientific presentations addressing the original 21 NORA priorities and anticipating research areas for the next ten years. The symposium will be a unique forum for a broad cross-section of the occupational safety and health community to learn about the variety of research accomplishments stimulated or anticipated by NORA. For more information about the symposium, please visit the NORA Web site or e-mail the NORA coordinator at noracoordinator@cdc.gov.

Second Symposium on Beryllium Particulates and Their Detection

NIOSH, the Rocky Mountain Center for Occupational and Environmental Health, the U.S. Department of Energy, Beryllium Health & Safety Committee, Eichrom Technologies, Inc., and the Savannah River National Laboratory will convene the 2nd Symposium on Beryllium Particulates and Their Detection on November 8-9, 2005 in Salt Lake City, UT. This symposium, held in connection with the fall meeting of the Beryllium Health and Safety Committee, will devote one day to sampling issues (air, surface, and bulk) and one day to issues of sample preparation, laboratory analysis, and portable instrumentation. The format includes oral presentations, vendor displays, panel discussions, and a poster session. More information on the symposium can be found at http://www.rmcoeh.utah.edu/besymp.

International Symposium: Biomedical Aspects of Nano-Toxicology

NIOSH will sponsor an international symposium, "Nano-Toxicology: Biomedical Aspects," on January 29-February 1, 2006, in Miami, FL. Invited speakers from the U.S. and abroad will address key issues for assessing the toxicology of nanomaterials and determining if such materials pose an occupational health risk. Other sponsoring organizations are the University of Pittsburgh, Inter Health Neutraceuticals, the U.S. Environmental Protection Agency, and Avanti Polar Lipids, Inc., Alabaster (USA). Additional details and a registration form are available at http://www.pitt.edu/~nanotox/index.htm.

IFISH 3

The *Third International Fishing Industry Safety and Health Conference (IFISH 3)* will be held on February 1-4, 2006 in Chennai, India. *IFISH 3* is for those interested in small-scale and commercial fishing safety and injury prevention and will include a stimulating program with keynote speakers, presentation of scientific papers and posters and workshop. In addition, a thematic workshop on Tsunami will follow the conference on February 6-7, 2006. The conference is convened by the Bay of Bengal Programme Inter-Government Organization in collaboration with the NIOSH Alaska Field Station and the Food and Agricultural Organization of the United Nations. More information on the conference can be found at http://www.ifish3.corg.

Work, Stress and Health 2006: Making a Difference in the Workplace

NIOSH, the American Psychological Association, the National Institute of Justice of the U.S. Department of Justice, the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education, and the U.S. Department of Labor will convene the sixth international conference on occupational stress and health, *Work, Stress, and Health 2006: Making a Difference in the Workplace* in Miami, FL, March 2-4, 2006. The conference is designed to address the constantly changing nature of work, and the implications of these changes for the health, safety, and well-being of workers. In keeping with the conference theme, there will be a particular focus on the translation of research to practice and workplace programs, policies, practices, case experiences, and other efforts to prevent stress in today's workplace. More information about the conference can be found at http://www.apa.org/pi/work/wsh2006.html.

Call for Abstracts: 13th International Respiratory Protection of Healthcare Workers and Emergency Responders

Abstracts are currently being accepted for the 13th International Respiratory Protection of Healthcare Workers and Emergency Responders Conference. The conference will be held August 27-September 1, 2006 in Toronto, Ontario, Canada. Topics for papers include respiratory protection for healthcare workers, emergency responders, and those in developing countries, updates on standards and regulations, emerging hazards and technologies, and fundamentals of respiratory protection. The deadline for abstract submissions is March 31, 2006. More information on the Call for Abstracts is available at http://www.isrp.com.au/isrpcom/callforpapers_toronto.htm or by contacting Ziqing Zhuang at ZZhuang1@cdc.gov. Additional information on the conference can be found at http://www.isrp.com/au.

"Acronym" of the Month

Air-Purifying Escape Respirators (APER) are air-purifying devices which use a chemical cartridge combined with a particulate filter to purify contaminated air.

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